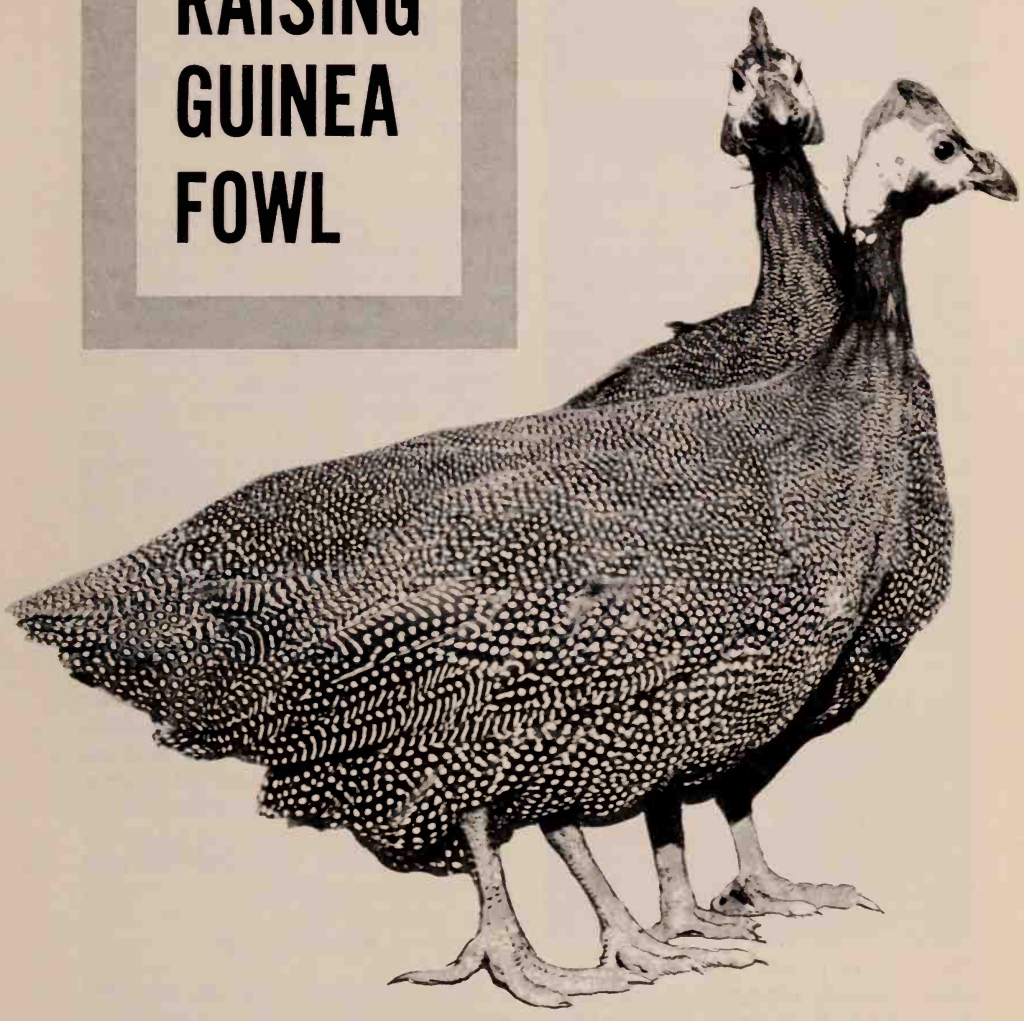
RAISING GUINEA FOWL



Leaflet No. 519 • U.S. DEPARTMENT OF AGRICULTURE

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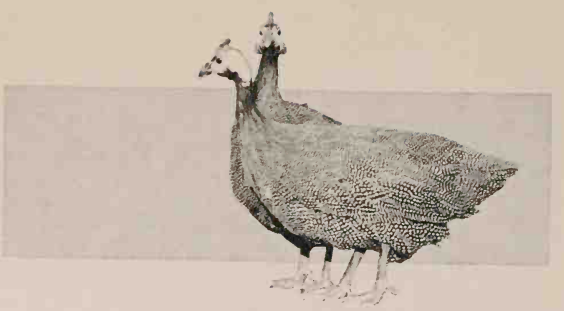

Many hotels and restaurants in large cities serve guineas at banquets and club dinners as a special delicacy. Prime young guineas are used as a substitute for game birds such as grouse, partridge, quail, and pheasant.

The flesh of young guineas is tender and has a fine flavor resembling that of wild game. Old guineas may be tough, and the flesh rather dry. Dressed guineas are attractive in appearance, although darker than common fowls.

PRODUCTION

Some guineas are raised in flocks of 100 or more, but most are raised in smaller flocks. Through lack of good management, many farmers who keep small flocks of guineas obtain only a few young birds from each hen.

Volume of Production

According to the 1939 census, about a million guineas were raised on farms in the United States in that year. The census of 1954 reported that only about a quarter of a million were raised. The census of 1959 reported only on the number of guineas *sold* from farms, and this report is not comparable with the previous reports on the number *raised*. It is estimated that approximately 3 million guinea fowl were raised in 1974, primarily on a decreasing number of small farms in the Southern States.

States raising the most guineas were Texas, Oklahoma, New York, Georgia, Missouri, North Carolina, Tennessee, Pennsylvania, Mississippi, and Alabama.

Prices

Highest prices for guinea fowl are obtained in large cities, particularly in the East. Guinea raisers who are near good city markets or who have developed a retail trade usually receive excellent prices for dressed young guineas.

The majority of guineas are produced on general farms, put through the poultry-processing companies, and then shipped to city markets.

Baby-Keet Production

The sale of guinea hatching eggs, guinea chicks (baby keets), and guinea fowl for breeding is very limited. Only a few hatcheries have taken up baby-keet production. These hatcheries have created an interest in guineas and have provided a market for hatching eggs.

VARIETIES OF GUINEA FOWL

Wild Species

Many species of wild guinea fowl are found in Africa. The fowls derive their name from Guinea, a part of the west coast of that continent. The common domestic guineas are descended from one of

these wild species (*Numida meleagris*).

In Africa, guineas are highly prized by hunters as game birds, and in England, they are sometimes used to stock game preserves.

Domesticated Varieties

Guineas have been domesticated for many centuries; they were raised as table birds by the ancient Greeks and Romans. They were brought to this country by the early settlers.

There are three principal varieties of domesticated guinea fowl in the United States—Pearl, White, and Lavender. The Pearl and the White are the most highly prized.

The Pearl variety has a purplish-gray plumage, regularly dotted or "pearled" with white. It is so handsome that the feathers often are used for ornamental purposes.

The White variety has pure-white plumage. Its skin is lighter in color than that of the Pearl variety.

Lavender guineas resemble those of the Pearl variety, but their plumage is light gray or lavender regularly dotted with white (fig. 1).

By crossing the Pearl or Lavender varieties with the White, what is known as the "splashed" guinea is produced. Its breast and flight feathers are white, and the rest of the plumage is pearl or lavender.

Many casual crosses between guineas and chickens have been reported but the progeny usually is sterile. The guinea-chicken cross (fig. 2), also known as a "guin-hen," may be as large as the chicken parent; because of its bare head and neck areas, it sometimes is mistakenly assumed to be a turkey-chicken cross.

Keets are very attractive. Those of the Pearl variety resemble young quail. They are brown, the underpart of the body is lighter than the rest, and the beak and shanks are red. The first feathers, which are

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Figure 1.—Color of the plumage of the Pearl guinea (*A*) is purplish gray; the Lavender (*B*) is light gray or lavender; both varieties are regularly dotted with white. The White guinea (C) is pure white.

brown, are replaced gradually by the "pearled" feathers; when the birds are about 2 months old, the brown feathers have disappeared completely. About this time the wattles and helmet begin to make an appearance.

No standard of perfection has been set for guineas as the birds are not recognized by the American Poultry Association. They are exhibited at poultry shows throughout the country, however, and most of these shows offer prizes for the best birds.

In judging guinea fowl, the points regarded as most important are good size and uniform color. At maturity, both male and female guineas range from 3 to 3½ pounds in weight. Presence of white flight feathers is the most common defect in the Pearl and Lavender varieties.

DISTINGUISHING GUINEA COCKS FROM HENS

Male and female guinea fowl differ so little in appearance that many persons find it difficult to tell them apart. Persons who are inexperienced in raising these fowl may unknowingly keep all males or all females as breeding stock.

Usually, sex may be distinguished by the difference in the cry of the birds and by the larger helmet and wattles and coarser head of the male. (See cover illustration, showing male facing front.)

In young male guineas, 12 to 15 weeks old, the wattles have thicker edges than do those of the females. The cry of the female sounds like "buckwheat, buckwheat," or "put-rock, put-rock," and is quite different from the one-syllable shriek of the male. When excited, both the male and the female emit one-syllable cries, but at no time does the male's cry sound like "buckwheat, buckwheat." Sex can be distinguished by the cry of the birds after they are about 2 months old.

Guineas often are useful in protecting the farm flock from marauders by their loud, harsh cry and pugnacious disposition. They destroy insects in the garden. They do not scratch, and therefore are less destructive than chickens.

MANAGEMENT OF BREEDING STOCK

Mating

In their wild state, guinea fowl mate in pairs. This tendency prevails also among domesticated guineas if males and females in the flock are equal in number. As the breeding season approaches, mated pairs range off in the fields in search of hidden nesting places in which it is difficult to find the eggs.

Under domestic conditions, it is not necessary to mate the birds in pairs to obtain fertile eggs. On most general farms, one male is usually kept for every four or five females. When guineas are kept closely confined, one male may be mated with six to eight females, and several hens will use the same nest.

Confining the Breeders

On some farms the breeders are kept confined during the laying period in houses equipped with wire-floored sun porches. Open-front poultry houses that have plenty of ventilation are desirable.

Guinea-breeding stock usually are allowed free range. They are difficult to confine in open poultry yards unless their wings are pinioned or one wing is clipped. Birds on range also may be treated in this manner.

Guinea keets may be pinioned after they are from 1 to 2 weeks old by snipping off the last joint of the wing. It is more difficult to pinion an adult bird. When this operation is performed on a full-grown bird,

the wing must be tied up to prevent excessive bleeding.

Another method of treating adult stock is to clip the flight feathers of one wing; this should be done every year.

Feeding Breeding Stock

Young guineas raised for breeding should have a growing diet in fall and winter prior to egg production, a breeder diet during the laying season, and a maintenance ration after the hens are through laying.

A breeder mash containing 22 to 24 percent protein should be kept available to the birds, beginning about a month before eggs are expected. A good commercial chicken or turkey breeder mash will give satisfactory results, with birds either on range or in confinement, when fed in accordance with the manufacturer's directions. Clean, fresh water should always be available.

EGG PRODUCTION

The number of eggs a guinea hen will lay depends on her breeding and management. A hen that is of good stock and is carefully managed may lay 100 or more eggs a year.

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Figure 2.—Barred Rock rooster and Pearl guinea hen with their crossbred progeny (guin-hen).

Breeders generally produce well for 2 to 3 years; sometimes they are kept as long as 4 to 5 years in small farm flocks. In such flocks, hens usually will lay about 30 eggs and then go broody. If broken of broodiness, they may continue laying into the fall, and may produce from 50 to 100 eggs a year. Selection of breeders for egg and meat production traits, as practiced with chickens, would likely result in considerable improvement.

Guinea hens usually start laying in March or April, and may continue to lay until October. The hens will lay in the house or in the yard if they are kept confined.

Breeders sometimes are kept confined during the day until about 3 o'clock in the afternoon or until they have laid. If allowed free range, they will make nesting places among the weeds and brush along the fences or in the fields. Two or three marked eggs should be left in these hidden or "stolen" nests so that the hens will continue to lay there. Gather the eggs daily, but do not disturb the hens while they are laying.

Keep the eggs in a cool place at 55° F., and do not hold them longer than 1 or 2 weeks before setting.

Guinea eggs are smaller than chicken eggs. They weigh about 1.4 ounces each; chicken eggs average about 2 ounces (fig. 3).

INCUBATION

Natural Methods

The incubation period of guinea eggs is from 26 to 28 days; the incubation method is the same as for turkey eggs. Natural methods of incubation are generally used in small flocks; for large flocks, incubators are more satisfactory.

Chicken hens are commonly used for hatching guinea eggs as they are more adaptable than guinea hens. Guinea hens usually are too wild to be set anywhere except in

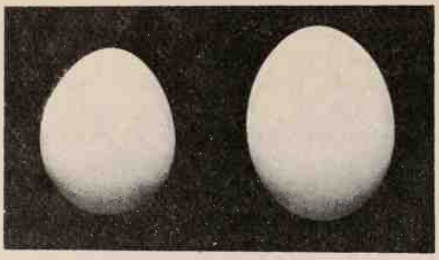

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Figure 3.—Relative size of egg of a guinea hen (left) and a chicken egg (right).

the nests where they have become broody.

As soon as some of the guinea keets hatch and begin moving about, the guinea hen is likely to leave the nest, abandoning the eggs that are not hatched. These eggs may yet hatch if, while still warm, they are put under another broody hen or in an incubator.

From 12 to 15 eggs may be set under a guinea hen; 20 to 28 may be set under a large chicken hen. Hens should be treated for lice before they are set.

Protect outside nests from the weather and from prowling animals. An individual run may be provided for each hen, or the hens may be taken off the nests daily and given feed and water.

Incubators

Two types of incubators may be used to incubate guinea eggs. One of these is known as a forced-draft incubator, in which a fan circulates the air. The other type has no fan and is known as a still-air machine.

The correct temperature and humidity of the air within forced draft incubators are about the same for both guinea and turkey eggs. Forced-draft incubators usually operate at about 99.5° to 99.7° F. and 57- to 58-percent humidity for the first 3 weeks.

Some incubator manufacturers recommend a lower temperature (97° F.) and a higher humidity (60 percent) during the last week of incubation while the eggs are in the h a t c h e r. Other manufacturers, however, recommend that temperature and humidity remain the same throughout incubation.

In the still-air, single-tier incubators, the bulb of the thermometer should be placed even with the top of the eggs. The temperature should be maintained at 102° F. for the first 3 weeks, and at about 103° for the fourth week. Humidity is determined by use of a hydrometer, and should be 57 to 58 percent. To maintain the proper humidity, shallow pans filled with water may be placed below the incubator trays. Each egg should be turned at least four or five times daily for the first 24 days of incubation. The manufacturer's directions should be followed for each type of machine.

REARING KEETS IN FARM FLOCKS

Chicken hens make the best mothers for guinea keets. Guinea hens are likely to take their keets through wet grass and lead them too far from home. Often, guinea hens will remain out in the fields at night instead of returning to their brood coops.

When two or more hens are set at one time, the keets may be doubled up at hatching time, and any keets hatched by guinea hens may be given to chicken hens to raise. A large chicken hen will brood as many as 25 guinea keets.

Place clean, dry litter in the coop. For the first 2 or 3 days the hen and keets should be confined to the coop, which may or may not have a small covered yard attached. After that time, the hen usually is confined and the keets are allowed to range, or both hen and keets may be allowed their freedom.

Brood coops should be closed at night to keep out predatory animals.

The young keets should be kept confined in the morning until the grass dries. Allow the keets to range on clean grassland, and move the coops weekly or oftener to fresh ground.

Guineas raised by natural methods usually will leave their coop when they are from 6 to 8 weeks old, and will begin roosting at night in a nearby tree or other roosting place. They prefer roosting in the open, but if they have been raised with a chicken hen, they can be trained to follow her inside a poultry house to roost. If they have become accustomed to going into a house or other enclosure, they will not be so difficult to catch when they are wanted for the market.

Guineas often will remain close to the mother hen until they are almost fully grown. This attachment tends to control the natural wild instincts of the guineas and simplifies their production and management.

COMMERCIAL REARING

Guinea keets may be raised in the same kinds of brooders and brooder houses as are used for turkeys or chickens. The recommended brooding methods and temperatures are similar to those used for turkeys.

When guinea keets are first put under the brooder, they usually are confined there by a guard placed around the hover. Baby guineas may go through ½-inch mesh wire, so finer wire or some other kind of guard is desirable. The guard should gradually be enlarged, and then discarded entirely when the keets are about 10 days old.

Brooder Temperatures

The best temperature at which to keep the brooder depends on the style of hover, the age of the guinea keets, and the weather. Keets always should be kept comfortable. Hovers operated in cool rooms are started at about 95° to 100° F., and kept at about 95° for the first 2 weeks. After that time, the temperature may be reduced about 5° a week, or it may be kept at 90° to 95° as long as the keets need heat. Batteries sometimes are used for brooding guinea keets for the first 3 weeks, after which the keets are transferred to brooders.

Brooder Houses

Guinea keets are raised successfully in confinement in brooder houses that have wire-floored sun porches attached and equipment similar to that commonly used for raising young turkeys. They may be kept in these houses until they are ready for market. Flocks of as many as 200 keets are kept in brooder houses, and sometimes much larger numbers are raised in one group.

On most general farms young guineas are raised in small flocks, usually only 30 to 40 to a brooder. Careful sanitation and clean ground are important where good sized flocks of young guineas are raised.

FEEDING

Guineas are fed much the same as turkeys. Their first feed may be turkey starting mash or crushed pellets upon which is scattered a little oatmeal or tender, finely chopped green feed. The starting mash should contain about 25 percent protein. Clean water always should be available.

Growing mash and grain may be fed after the keets are about 6 weeks old. During the first 10 days, either keep mash before the keets all the time or feed them 4 or 5 times daily. Usually, mash is kept before birds in confinement.

Young guineas will grow faster and be ready for market earlier if they are fed freely. Only two feeds a day need be given keets on range after they are well started. It is advisable to feed all flocks in late

afternoon so they will return to their coops at night.

MARKETING

Consumer Demand

A few small guineas usually start coming on the market late in June, and the general farm supply begins late in August. Thus, the normal marketing season is during the latter part of the summer and through the fall.

About half of the guinea fowl raised are for special and gourmet markets. Guinea fowl for special markets are sold alive and are primarily purchased by people of Oriental descent. The gourmet birds are sold dressed and frozen to shiplines, hotels, and restaurants.

Guinea fowl are almost always at least 15 weeks and usually 16 to 18 weeks of age when they are sold. At this age their live weight is 2¾ to 3¼ pounds with a dressed weight of 2¼ to 2¾ pounds. Most buyers want a dressed weight of at least 2 pounds.

In mid-1975 the dressed price of guinea fowl was $2 per pound, which is about the same as that paid for dressed pheasant and chukar. It appears that guinea fowl and other game birds compete for the same market.

Preparing Guineas for Market

Most guineas are sold alive by the farmers to poultry processors. Then, the birds usually are dressed and scalded in the same way as chickens, except in very special cases when they are marketed like game birds with the feathers left on. For all retail markets, as well as for hotel and restaurant trade, the feathers should be removed.

Guineas prepared for market by producers may be either scalded or dry picked. In dry picking, the roof of the mouth is severed first to insure thorough bleeding, and the knife is then thrust through the groove in the roof of the mouth into the brain. When the brain is pierced, the feathers are loosened by a convulsive movement of the muscles; this makes them easier to pick. If guineas are to be marketed with the feathers left on, all that needs to be done is to bleed the birds properly.

Young guineas are quickfrozen on the farm or at the poultry packing house to assure a regular supply as needed by the hotel, restaurant, and retail trade.

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